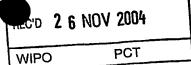
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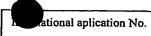


## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Artcle 36 and Rule 70)

Applicant's or agent's file reference PAKIST03141	FOR FURTHER ACTION  SeeNotificationofTransmittalofInternationalPrel Examination Report (Form PCT/IPEA/416)		•				
International application No. PCT/KR2003/001441	International filing date(day/mo 21 JULY 2003 (21.07.20		c (day/month/year) 002 (20.07.2002)				
International Patent Classification (IPC)		<del></del>	002 (20.07.2002)				
IPC7 A61K 31/245							
Applicant		· · · · · · · · · · · · · · · · · · ·					
KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY et al							
<ol> <li>This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</li> </ol>							
2. This REPORT consists of a total	of 4 sheets, include	ling this cover sheet.					
This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).							
These annexes consist of a total	ofsheets.						
I							
Date of submission of the demand	Date of	of completion of this report					
19 FEBRUARY 2004	(19.02.2004)	09 NOVEMBER 2004 (09	9.11.2004)				
Name and mailing address of the IPEA/		orized officer	Alle				
Korean Intellectual Property 920 Dunsan-dong, Seo-gu, I Republic of Korea	Dogicon 202 701	KIM, Hee Jin					
Facsimile No. 82-42-472-7140	Telep	hone No. 82-42-481-5412					





PCT/KR2003/001441

Ľ	L. Basis of the report						
1.	1. With regard to the elements of the international application:*						
Ì	X	the international application as originally filed					
		the description:					
ĺ		pages	, as originally filed				
ļ		pages	, filed with the demand				
	_	the claims:					
	Ш	pages	oo amininalla filad				
		pages, as amended (together with an	, as originally filed v statment) under Article 19				
		pages, filed with the letter of					
		pages, filed with the letter of					
		the drawings:					
		pages	, as originally filed				
		pages, filed with the letter of	, filed with the demand				
		the sequence listing part of the description:					
		pages	as originally filed				
		pages	, filed with the demand				
		pages, filed with the letter of	· .				
2.	the i	regard to the language, all the elements marked above were available or furnished to this Authoritements application was filed, unless otherwise indicated under this item.  Experiments were available or furnished to this Authority in the following language Englished the language of a translation furnished for the purposes of international search (under Rule 23 the language of publication of the international application (under Rule 48.3(b)).	shwhich is				
		the language of the translation furnished for the purposes of international preliminary exami	nation(under Rules 55.2 and/				
	لــا	or 55.3).	manon and rates 35.2 and				
3	3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:						
		contained inthe international application in written form.					
		filed together with the international application in computer readable form.					
		furnished subsequently to this Authority in written form.					
	$\overline{\Box}$	furnished subsequently to this Authority in computer readable form					
	$\Box$	The statement that the subsequently furnished written sequence listing does not go be-	vond the disc losure in the				
	لـــا	international applicationas as filed has been furinshed.					
		The statement that the information recorded in computer readable form is identical to the vibeen furnished.	vritten sequence listing has				
4.		The amendments have resulted in the cancellation of:					
		the description, pages the claims. Nos.	<del></del>				
		the claims, Nos the drawings, sheets					
5.		the drawings, sheets					
		This report has been established as if (some of) the amendments had not been made, since go beyond the disclosure as filed, as indicated in the Supplemental Box(Rule 70.2(c)).**	they have been considered to				
*	Replain this	cement sheets which have been furnished to the receiving Office in response to an invitation und opinion as "originally filed." and are not annexed to this report since they do not contain 0.17).	der Article 14 are referred to amendments (Rules 70.16				
**	** Any replacement sheet containing such amendments must be referred to under item I and annexed to this report.						

V.	Reasoned statement under Article 35(2) with regard to novelty, inventive st	en or industrial applicability
	citations and explanations supporting such statement	- F or

1.	Statement			
	Novelty (N)	Claims	1-11	YES
		Claims		NO
	Inventive step (IS)	Claims	1-11	YES
		Claims		NO
	Industrial applicability (IA)	Claims	1-11	YES
		Claims		МО

2. Citations and explanations (Rule 70.7)

Reference is made to the following documents:

D1: US 4978772

D2: Alimentary Pharmacology and Therapeutics, 15(3), pp.355-361, 2001

D3: Naunyn-Schmiedeberg's Archives of Pharmacology, 359(5), pp.420-427, 1999

D4: British Journal of Pharmacology, 117(3), pp.463-470, 1996

The present invention relates to a use of octylonium bromide to increase cellular uptake of drugs.

D1 relates to a use of octylonium bromide for local applications in the gastrointestinal tract of the digestive system to obtain the arrest of the motility of the gastrointestinal tract. D2 discloses that octylonium bromide is a smooth muscle relaxant in irritable bowel syndrome. D3 describes that octylonium bromide reduces stimulated motility of intestinal smooth muscle by multiple action mechanisms. D4 discloses that octylonium bromide is a potent blocker of neuronal nicotinic acetylcholine receptors.

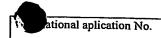
### 1. Novelty

None of the cited documents discloses a use of octylonium bromide as an absorption enhancer of drugs by inhibition of p-glycoprotein.

Accordingly, the present invention can be considered novel.

(Continued on Supplemental Sheet.)





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Supplemental Box (To be used when the space in any of the preceding boxes is not sufficient)

Continuation of:

## 2. Inventive Step

The skilled person would not have found an incentive to use octylonium bromide as an absorption enhancer because controlling the motility and tension of the intestine has no relationships with the inhibition of p-glycoprotein.

Therefore, the present invention is considered to involve an inventive step.

3. Industrial applicability

The present invention possesses industrial applicability.